were pollinated with pollen from any one of the 19 colonies, seeds were produced. This behavior leads to the conclusion that the 22 colonies tested represent offspring from only 2 seeds.

Second, plants were started from seed. Each seedling was grown with precautions so that its root-system could not intermingle with that of the other seedlings. At the age of one year, the root-system of each of 20 seedlings was divided into 2 parts. One half of each seedling was used to start an isolated colony on some abandoned farmland and the corresponding half of each seedling was planted in a row in my garden. The isolated colonies representing the offspring from single seeds have been under observation for 3 years without a single seed having been produced. These patches correspond to the patches in and about the cemeteries of Tompkins County and are sterile. The colonies in the garden produced abundant seed every year. However, those flower clusters which had been bagged produced seed only when cross pollinated and not when selfed. These patches correspond to the areas in eastern New York each of which had been started from several seeds.

It appears that the failure of seed production by Cypress Spurge under certain conditions is due to self sterility and the ability to produce seed by this species is not affected by its highly developed method of vegetative reproduction whereby it may reproduce and spread for many years. The evidence here presented indicates that if a colony represents offspring from a single seed it is barren, but if a colony represents the offspring from several seeds it fruits freely and produces viable seeds in abundance.

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SMALL'S "FERNS OF THE VICINITY OF NEW YORK."[1]—For a long time Dr. Small has had an especial interest in ferns. Amateurs and students of the group in the northeastern United States may congratulate themselves that this interest has lured him from his usual field in the South into their territory. For the result is a compact, handy and excellent manual of fernworts which, though it treats directly only the New York local flora area (a circle with a radius of 100 miles and the city as center), will serve quite adequately for most of New England and a considerable fraction of the Middle States. It comes at a time when most of the familiar fern books are out of print; and it is one of the few of its kind written by a competent and experienced professional botanist.

About 90 species are keyed, described and illustrated (except *Isoetes*) with neat and accurate line drawings, mostly by Miss Grace George.

[1] Small, J. K. Ferns of the Vicinity of New York. 285 pp., figs. The Science Press, Lancaster, Pennsylvania. $2.50.

According to Dr. Small's usual habit, the descriptions are supplemented by much collateral information, historical, cultural and geographic. An introduction discusses briefly the botanical history of ferns, the topographic divisions of the New York area and the groups of species to be found in each. A full list of synonyms, including a good many varieties and forms not mentioned in the text, is appended and should be useful—even though it persists in the bibliographically inaccurate habit of attributing trinomial names to authors who never used them.

Naturally the book reflects Dr. Small's well-known taxonomic and nomenclatural views. The "untidy" genus *Dryopteris* is set in order by dividing it into three. *Athyrium* also becomes three, one of them a wholly new genus, *Homalosorus*, erected for the narrow-leaved spleenwort. Following Clarkson, *Dryopteris spinulosa*, var. *americana* is treated as a separate species, *D. campyloptera*. The duplicate binomial, *Thelypteris Thelypteris* is both unfamiliar and illegitimate according to present generally accepted rules. However, a comparative list of names in this work, Gray's Manual and the Illustrated Flora makes it easy to correlate nomenclatural novelties—and they are not many. In the ferns here treated, the agreement between the old American code and the revised international rules is well-nigh complete.

Although the proof was read by no less than four highly competent colleagues as well as by the author, an occasional minor error has managed to run the gauntlet. *Botrychium multifidum* (p. 170) is not "American only"; it was originally described from Siberia. *Lycopodium flabelliforme* was not "named in 1753" but in 1901. The figure of *Botrychium obliquum* illustrates rather the variety *tenuifolium* than the typical form described in the text. But such slips are few and of little import. The book may be used with confidence and enjoyment; it should have a long and serviceable life.—C. A. Weatherby, Gray Herbarium.

Ipomoea heptaphylla in Georgia and Mexico.—Among the plants I had the opportunity of collecting on a recent journey through the southeast part of the United States, there was found a specimen of *Ipomoea heptaphylla* (Rottl. & Willd.) Voigt. This plant was collected (Oct. 9th, 1934) half a mile from Macon, Ga. along the Ocmulgee River, climbing on a *Solidago*. Thus, it extends somewhat the known area of distribution of the species, which occurs in the Old World Tropics, in continental tropical America, Cuba, Jamaica, Antigua, Guadeloupe and Curaçâo, St. Thomas and Puerto Rico, and in the United States (according to Small, Man. of Southeastern Flora, 1087, 1933) only in Louisiana, near New Orleans. It is interesting to note that the only specimen of *Ipomoea heptaphylla* from continental America preserved in Field Museum Herbarium of Chicago was collected by *Lundell* (no. 979) at Tuxpeña, Campeche. So far as I know, the plant has not been reported for Mexico.—Charles Baehni, Genève.

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